

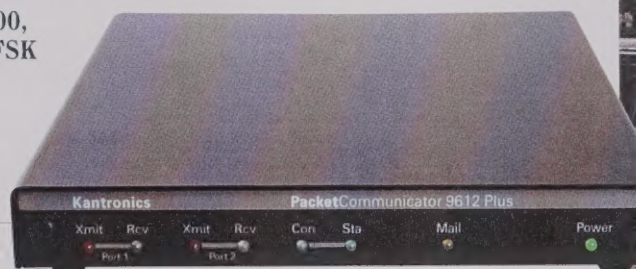
APRS®

KPC-9612 Plus™

Packet Communicator

The Kantronics KPC-9612 Plus is a versatile multi-port, multi-speed data controller designed to fill many different roles, now and in the future. Capable of speeds up to 38.4 kb (56k with crystal change) and optional three port operation, the KPC-9612 Plus opens a new era in user flexibility and customization.

- Dual port 1200/9600 bps operation, standard
- Port 1 supports 1200 bps
- Port 2 supports 4800, 9600, 19200, 38400bps with DFSK modulation
- Expansion header for optional third port 50 ~ 300; 1200 or 9600 ~ 38400k bps
- "NEWUSER" mode provides a quick start for packet newcomers
- Large capacity internal mailbox and mail forwarding feature
- NEW multiple user mailbox flashes Mail lamp for up to 10 call signs
- GPS operation mode allows use with APRS® or other geolocation software
- NEW Remote Control and telemetry functions with two A/D inputs and two control line outputs
- NEW Paging transmit/receive capability—POCSAG compatible
- NEW and faster HC11 Motorola® central processor
- NEW digital audio drive control. Set from keyboard or by remote control
- Low current requirements
- Network node functions with standard "KA" Node or optional K-Net™ firmware
- Optional K-Net node network firmware retains regular TNC functions
- BBS, KISS, XKISS, HOST, TERMINAL, GPS and MODEM operating modes
- Upgradeable as new firmware is released
- "Online" HELP feature
- 128k memory standard; 512k optional
- Comes with data connectors, data wire, coaxial power plug, detailed manual, basic software
- Use with base, mobile or hand-held radios
- Made in the USA—Limited one year warranty to original purchaser



A KPC-9612 Plus was selected for service aboard Mir

Kantronics

1202 E. 23rd St., Lawrence, KS 66046
tel: 785-842-7745 • fax: 785-842-2031
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web: www.kantronics.com

KPC-9612 Plus™

The Kantronics KPC-9612 Plus is a versatile Packet Communicator engineered for years of dependable performance. Kantronics has been a pioneer in digital communications, taking care to listen to the suggestions of digital operators, like you. The result is a data unit that has become the standard by which others are measured.

Specifications - Kantronics KPC-9612 Plus Data Communicator

Dimensions (HWD)	0.8" x 6.7" x 6.9" or 20 mm x 170 mm x 175 mm (w/o projections)
Weight	18 oz or .5 kg (approx)
Power Requirements	5.5 VDC ~ 25 VDC, 45 mA (LEDs on, unit active)
Plug	Coaxial, center pin positive 2.1 mm
External Connection Ports	DB-9 female (radio port 1); DB-15 female (radio port 2); DB-25 female (computer/data terminal)
Watchdog timer	3 minutes (port 1), 40 seconds (port 2) (approx)
External Carrier Detect	Pulldown to ground
A/D Converter	Two inputs; 0 ~ 5VDC 8-bit accuracy Z in = 20k
Data Rate Port 1	1200 bps (recommended); 300, 400, 600. Also selectable at 800 Hz shift
Data Rate Port 2	4800, 9600, 19200, 38400 bps
PTT Output	Open drain, +50 VDC max, 200 mA max
Audio Output Port 1	Continuously adjustable 1 mv p-p ~ 4 v p-p
Audio Output Port 2	2 mv p-p ~ 100 mv p-p (J 20) off; 80 mv p-p ~ 4 v p-p (J 20 on)
Output Impedance	600Ω AC coupled (port 1); 600Ω AC or DC coupled (port 2)
Modulation Port 1	1200 bps FSK full duplex CCITT V.23 1300 Hz/2100 Hz
Modulation Port 2	Gaussian Filtered DFSK with normal Bandwidths of .3, .5 or full Duplex 4800, 9600, 19200 38400 bps
Audio Input	
Sensitivity Port 1	5mv p-p ~ 35 V p-p
Sensitivity Port 2	lo: 15 mv ~ 200 mv p-p (J 16 on); hi 80 mv ~ 2.0 v p-p
Dynamic Range	Port 1: >70dB; Port 2: >20 dB (either range)
Input Impedance	Unbalanced, 10K W; 600 Ω with Jumper J3 installed
Max input voltage	Port 1: ±12VDC; 35V p-p; Port 2: ±25VDC 25V p-p
Equalization	Port 1: None or Fixed; Port 2: Variable, Software controlled
RX S/N	0 ~ 3VDC (Z out = 2.2k)
Operating Modes	Packet, WeFax, KISS, XKISS, HOST, GPS, PAGING, MODEM
LED Indicators	Power, Xmit, Rcv, Connected, Status, Mail (user option on/off)
Remote Control Access	All controller functions, user defined password
External Reset	Pulldown to ground
Operating Protocols	AX.25 Levels 1 and 2 (user selectable)
Compliance	FCC Class B; Europe - CE Conformity

Some KPC-9612 Plus Applications Include:

- "Keyboard to keyboard" communications
- Send/Receive Files
- Send/Receive Paging signals (POCSAG 512, 1200, 2400)
- Digipeater
- Personal Mail Box
- Local area node
- Remote control devices
- Remote access
- Network node operation (requires optional K-Net™ firmware)
- Multi frequency "node stacking" capability (with K-Net™ firmware)
- BBS operations and message forwarding
- GPS position transmitting and tracking (requires NMEA-0183 data)
- Data storage and retrieval
- Weather facsimile reception (requires additional software)
- EMWIN weather information (requires additional software)
- 1200 <-> 9600 gateway operation

The KPC-9612 Plus can be used in the field as a GPS mobile "tracker" or with a mobile data terminal. Its broad power tolerances (6 ~ 25 VDC) allow for maximum flexibility.

KPC-9612 Plus Options:

- Third Port Expansion Module
 - 1200bps (same parameters as Port 1)
 - 4800 ~ 38400 bps
 - HF Modes 50 ~ 300bps (release anticipated in late 1998)
- K-Net™ Networking Firmware
- 120VAC to 12 VDC power cube
- 512k memory expansion chip
- Hardware Single Port (HSP) cable
- PacTerm '98™ program for Windows 95*
- Superfax 2™ WEFAX software

A Quick Reference Guide To Kantronics Data Controllers

	High Speed	Ports	Packet	HF and VHF	Paging Monitor	GPS Ops	APRS® Ops	K-Net capable	9V batt option
KPC-3 Plus		One	Yes			Yes	Yes	Yes	Yes
KPC-9612 Plus	Yes	Three	Yes	Yes (option)	Yes	Yes	Yes	Yes	
KAM Plus		Two	Yes	Yes		Yes	Yes		
KAM 98		One	Yes	Yes		Yes	Yes		

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